

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: March 21, 1996
Date Received: March 14, 1996
Project: Metro Self Monitor, PO #M52618
Date Samples Extracted: March 15, 1996
Date Extracts Analyzed: March 20, 1996

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, AND ZINC
USING METHOD 6010**

**Samples Processed Using Method 3005A
Results Reported as mg/L (ppm)**

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M52618	0.92	0.86	0.82	0.08
Method Blank	<0.05	<0.05	<0.05	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: March 21, 1996

Date Received: March 14, 1996

Project: Metro Self Monitor, PO #M52618

**QUALITY ASSURANCE RESULTS
FOR CHROMIUM, COPPER, NICKEL, AND ZINC
BY INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Laboratory Code: 67189 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.92	0.81	13	0-20
Copper	mg/L (ppm)	0.86	0.79	8	0-20
Nickel	mg/L (ppm)	0.82	0.73	12	0-20
Zinc	mg/L (ppm)	0.08	0.09	12	0-20

Laboratory Code: 67189 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.92	87	93	80-120	7
Copper	mg/L (ppm)	5	0.86	94	96	80-120	2
Nickel	mg/L (ppm)	10	0.82	91	95	80-120	4
Zinc	mg/L (ppm)	5	0.08	92	94	80-120	2

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	97	99	80-120	2
Copper	mg/L (ppm)	5	95	95	80-120	0
Nickel	mg/L (ppm)	10	96	99	80-120	3
Zinc	mg/L (ppm)	5	95	95	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3012 16th Avenue West
Seattle, WA 98119-2029
FAX: (206) 283-5044

March 21, 1996

**INVOICE # 96ACU0321-1
DUPLICATE COPY**

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M52618: Results of testing requested by
Gerry Thompson, Project Manager for material submitted on March 14, 1996.

1 water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3012 16th Avenue West
Seattle, WA 98119-2029
FAX: (206) 283-5044

March 21, 1996

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on March 14, 1996 from your Metro Self Monitor, PO #M52618 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Bradley T. Benson
Chemist


keh
Enclosures
FAX: 382-7335
ACU0321R.DOC

FRIEDMAN & BRUYA, INC.
2012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282



KNJ A.I
3.14.96
2:15

SAMPLE CHAIN OF CUSTODY

Send Report To: Alaska Copper Works Contact: GERALD Thompson
Company: _____
Address: 625 N. 4th St
City, State, Zip: SEATTLE WA 98134
Phone #: (206) 352-8379 Date: 3-14-96

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	METRO Self monitor	m 52618
SAMPLERS (signature)	PROJECT LOCATION	
	3200 6 th Ave S.	
REMARKS	SAMPLE DISPOSAL INFORMATION	
	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	GERARD Thompson	A.C.W.	3/14/86	2:00pm
Received by: 	CHRIS BONDURANT	F.B.I.	3/14/86	2:01pm
Relinquished by:				
Received by:				